

Apple II Technical Notes



Developer Technical Support

Apple II GS

#99: Supplemental Scrap Types

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This Technical Note describes public scrap types.

Changes since March 1991: Added information on Scrap Type \$8003 (Resource Reference Scrap); added a cross-reference to HyperCard II GS Technical Note #3.

The *Apple II GS Toolbox Reference* lists only two known scrap types—text (\$0000) and pictures (\$0001). Other assigned scrap types are documented in this Note. The format used to describe the scraps is similar to that used in File Type Notes, where the offsets, given in the form (+xxx), determine the offset from the beginning of the scrap handle.

Sampled Sound Scrap (Type: \$0002)

The following describes the Sampled Sound scrap format. It consists of a ten-byte header followed by the sample data bytes. This format is identical to the sampled sound resource format.

Format	(+000)	Word	This must always be zero.
Wave Size	(+002)	Word	Sample size in pages (256 bytes per page). For example, an 8K sample takes 32 pages; a 128K sample requires \$200 pages.
Rel Pitch	(+004)	Word	The high byte of this word is a semitone value; the low byte is a fractional semitone. These values are used to tune the sample to correct pitch. (See HyperCard II GS Technical Note #3, Tuning Sampled Sounds.)
Stereo	(+006)	Word	The output channel for this sound is in the low nibble of this word.
Sample rate	(+008)	Word	The sampling rate of the sound, in Hertz (Hz).
Sound	(+010)	Bytes	The sampled sound data. The bytes are all 8-bit samples. The sample starts here and continues until the end of the scrap.

TextEdit Style Scrap (Type: \$0064)

The TextEdit Style Scrap format is the same as the `TEFormat` structure defined in Volume 3 of the *Apple IIGS Toolbox Reference*, which is also the same as the `rStyleBlock` resource format defined in the same volume.

Icon Scrap (Type: \$4945)

The Icon scrap format is the same as the format for Finder Icon Data records, documented in detail in the File Type Note for File Type \$CA, Finder Icon Files. If there is more than one Icon Data record in a scrap, they are concatenated together with no intervening space.

Mask Scrap (Type: \$8001)

The Mask scrap format is exactly the same as the PICT scrap (\$0001) format, except that the pixel image the picture draws contains only zeroes and ones. When drawn, this picture creates a mask. The mask has zeroes where the image can be seen through the mask, and ones where the mask does not allow the picture through. When pasting a Mask scrap, initialize the destination bitmap to zero and draw the picture.

You can create the mask image by using regular QuickDraw II calls (using ovals, rectangles, etc.) or you can create it independently and include it with `PaintPixels` or other pixel map manipulation routines.

Color Table Scrap (Type: \$8002)

The following describes the Color Table scrap format. The scrap contains color tables so that applications can keep custom colors with pictures copied to the clipboard. The scrap has the same format as the Apple Preferred Format picture PAlettes block:

NumColorTables	(+000)	Word	The count of the number of color tables in the scrap
ColorTableArray	(+002)	32 Bytes	The color tables for the scrap. There are NumColorTables of them, each 32 bytes long.

Resource Reference Scrap (Type: \$8003)

The Resource Reference scrap is designed to allow resource editors to exchange resource data through an external scrap file using the Scrap Manager.

resScrapType	(+000)	Word	Type of resource (within the resScrapPath file)
resScrapID	(+002)	Long	ID of resource (within the resScrapPath file)
resScrapPath	(+006)	WString	Full GS/OS class-one pathname to an extended file containing the specified resource.

If the specified resource contains references to other resources (for example, an `rWindParam1` resource with a title string, control list, control templates, etc.), all the referenced resources must be present in the `resScrapPath` file.

It is the responsibility of the application using this scrap to handle resource ID conflicts that might arise from a Paste operation. The application should not modify or destroy the `resScrapPath` file.

Further Reference

- *Apple IIGS Toolbox Reference*
- HyperCard IIGS Technical Note #3, Tuning Sampled Sounds
- File Type Note for file type \$CA, all auxiliary types, Finder Icons File
- File Type Note for file type \$C0, auxiliary type \$0002, Apple Preferred Format